Industronic
Energy in evolution

UPS-IND HF 1300 N1

Uninterruptible Power System
Three Phase, 300 ~ 800 kVA | 480V

2
Years of warranty

Features

- Online double conversion
- Inverter with three-level technologhy
- Power Factor 1.0
- Power Factor correction
- Intelligent ventilation control
- High AC/AC efficiency up to 97%
- Rectifier and inverter with 5th generation IGBT's
- Maintenance bypass
- Automatic Electronic Bypass
- Automatic ingress protection cut-off
- Battery charge management
- Intelligent monitoring system for bateries
- SNMP, RS485, MODBUS communications card
- Lead Acid batteries
- N+1 capacity and N+X+1 redundancy technologhy (Up to 8 devices)
- Ability to share battery bank for parallel systems (Lead acid batteries only)
- BESS capability (Energy Storage System)

Applications

- Computer equipment
- Laboratory equipment
- Medical equipment
- Data Centers
- Security systems
- Telecommunications
- Intelligent buildings
- Shopping centers

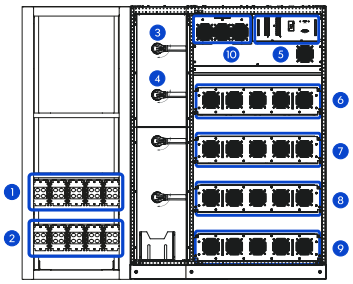
Complementary options

- Industronic voltage conditioner to protect the UPS and extend battery life
- Input and output isolation transformer
- Paralleling cabinet with external bypass without interruption

Problems solved

- Momentary high voltage
- Momentary low voltage
- Sastained high voltage
- Sustained low voltage
- Electrical noise
- Voltage peaks
- Power supply failure
- Frequency variation
- Harmonic distortion

Technical specifications



1. Mains input
2. Output to load
3. Bypass switch
4. Maintenance switch
5. Communication module
6. Battery charger module
7. Power module stage 3
8. Power module phase 2
9. Power module phase 1
10. Bypass mode

Model UPS-IND HF	13300	13400	13500	13600	13800
Input					
Capacity (kW/ kVA)	300/300	400/400	500/500	600/600	800/800
Voltage (Vca)	277/480				
Overload protection	Input switch and bypass switch				
Line voltage range (Vca)	-40% a +15% (-25% a +15% al 100%)				
Phases	Three-phase star, 3 phases + Neutral + Ground / Delta (3 phase + ground)				
Frequency (Hz)	50/60 ± 10 %				
THDi	≤ 3% at 100% resistive load/ ≤5% al 100% nonlinear load				
Input power factor	≥ 0.99				
Output					
Overload protection	Switch on output				
Output power factor	1.0				
Voltage (Vca)	277/480				
Voltage regulation range	± 1%				
Frequency (Hz)	50/60 Hz +/-0.5%				
Waveform (THDv)	Pure sine wave, THD ‹ 1% (Lineal load); ‹ 3% (Non-linear load)				
Transfer time(ms)	0.0, True online				
Connection type	Three-phase star, 3 phase + Neutral + Ground / Delta (3 phase + Ground)				
Overload	100%-105% 60 min; 106%-125% 10 min; 126%-150% 1 min				
Efficiency	96%				
Load unbalance capability	100%				
Energy return	Supports up to 100% of it's capacity				
Peak factor	≤ 3.1				
Battery bank					
Voltage (Vcd)	528 (408 a 660)			576 (408 a 660)	
Battery type	Lead acid (Sealed and maintenance free) (Lithium optional/Nickel cadnium optional)				
Full load backup time	Standard 5 minutes lead acid / 10 minutes lithium (For longer extended time contact factory)				
Maximum load current (A)	25 - 100			25 - 200	
Location	External bank				
Useful life time	3 to 5 years at 25ºC. At higher temperatures their useful life is considerably reduced. To keep the batteries healthy we recommend recharging them at least once every 3 months and to avoid damage recharge them every 6 months				
Physical and mechanical					
Audible noise (dB)	< 75, at 1 meter			< 80, at 1 meter	
MTBF (h)	233,000				
Operating temperature (°C)	-5 ~ 40				
Relative humidity	0 ~ 95% without condensation				
Maximum operating altitude (m.s.n.m.)	1500				
Cabinet	IP 20 / Steel with baked-on electrostatic epoxy painting				
Dimensions, Height x Width x Depth (mm)	1000 x 900 x 1950			1400 x 900 x 1950	
Weight (kg)(Batteries not included)	750			1150	
Technology					
Conversion type	Online double conversion (True online)				
Rectifier	High power factor IGBT type				
Inverter switching elements	IGBT with Pulse width modulated PWM technology				
Filters	PFC to reduce harmonic content (RMS)				
Battery status	Real time online and downloaded information with 3% accuracy				
Thermal dissipation (kBTU / h)	30.7	40.9	52.9	63.5	84.4
Internal bypass	Two bypasses: one automatic static and one manual for maintenance				
Paralleling	N+1 (up to 8 equipments)				
Certifications	CE-IEC 62040 -1, ISO 9001:2015, NOM				
Communication interface	RS485 / SNMP/ Contactos Secos / MODBUS				
Display (LCD a Color)	7 in touch + LED's with backlight: Input and output voltage, Charging capacity, battery voltage, operating status				
Alarm	Overload, abnormal input, low battery, failure				
Protection	Output short circuit, overload, overtempeature, low battery voltage, High/Low output voltage				

Specifications are subject to change and modification without notice, due to our commitment to continuous improvement in reliability, design and functionality of our products.